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By Della Mae Rogers

Of all the problems confronting business men today, none is receiving more attention than the problem of controlling operations by means of the budget. This is evidenced by the enormous amount of written data, published during the past two decades, on the subject of budgets. Men usually write about those things that absorb their thoughts and attention. It is difficult to find a commercial magazine today in which the budget is not discussed.

Some rather interesting questions present themselves to readers of this budgetary literature, for example:

(1) What is this business budget, and why all this sudden interest in it?
(2) What were the forces working together which resulted in its adoption by business, and how has it developed?
(3) Was the governmental budget, of which we have known for many years, taken over intact by business, or has the business budget gone through a gradual development, and along lines different from the governmental budget?

These are some of the questions whose answers I have been attempting to find by making an exhaustive review of the accounting and trade literature of the past thirty years.

The English word "budget" was probably taken over from the Latin word, "bulga," meaning a leather bag or knapsack. The Romans used it to carry a supply or store of food. They spoke of the bulga first as the bag, and then its contents. Early literature on the budget is limited to that on public funds. The original purpose of the budget in government was to curb the extravagance of monarchs. It was first used in England about 1760. Probably the earliest evidence of budgets in the United States is the informal budgetary statement that was submitted by Alexander Hamilton, the first secretary of the treasury, on January 9, 1790, to the house of representatives, as a part of his document entitled *A Report on Public Credit.* This report included a "general estimate for the services of the current year." Our national government did not, however, undertake to prepare a formal and detailed budgetary statement of its prospective expenditures and revenues until 1921, when the national budget act was adopted.

In the United States, however, the governmental budget seems to have been used first by municipalities. It was here adopted to curb the expenditures of municipal officers and to appease the restless taxpayers. One shortcoming of the municipal budget in the past has been that, though it did keep down expenditures to insure their proper planning and consideration, it did not provide an effective means of measuring and appraising the quantity, quality and unit cost of the service and production received for the outlays provided in the budget. The main purpose of governmental budgets is to control the expenditure of funds appropriated for special purposes or departments. Governments are not operated for profit; hence incomes are budgeted only in order to meet expenses. Controlling the volume and effectiveness of work done by governmental departments has not been stressed, and the result has been that public officers have failed to adopt a work programme or production-budget plan. There are, of course, isolated instances where governmental organizations have developed work-programme budgets for some of their departments.

After the budget had been tried by municipalities, various states also began to adopt the budget. Ohio appointed a budget commission in 1913, and had a budget in actual operation in 1915. New Jersey has had a budget at least since 1918. In 1916, Maryland amended its constitution so as to make the governor responsible for the appropriations bearing upon public policy. Some twenty-two states similarly declared themselves in favor of the principles set forth in this amendment.

The government and the business budget are not the only types of budget of which there is record. In a letter written two years before his death, George Washington recommended the budget form of accounting. He advised one to keep an account book, for "where no account of this sort is kept there can be no investigation, no correction of errors, no discovery, from a recurrence thereto, where too much or too little has been appropriated to particular uses. From an early attention to these matters important and lasting benefits may follow." References to the use of family and personal budgets are found as early as 1897. During the world war the family budget was often referred to and studied in the attempt to reach wage adjustments. At Smith college a special effort was made during the year 1914–1915 to induce students to adopt a budget; but it was optional, and of the 1638 who volunteered only 421 finished the year with a complete account. At Antioch college, Ohio, banking facilities, account keeping and training in budgeting are given in an introductory course, required of all students. At the beginning of the year each student, aided by an instructor, makes a budget of his own finances, and at the end of the year the budget is compared with the actual result.

There seems to be little literature available on the use of the budget by educational institutions. However, H. S. Ford, a few years ago, wrote an interesting comment on early experiences with the budget at Massachusetts Institute of Technology, which has doubtless been reflected in the experience of many other institutions. After a discussion of their auditing history, he says: "Now we reach 1910 and along comes our friend, the budget system. Ours was a limited budget at first, and covered only the academic department appropriations and the teachers' salaries. It still left much to be desired. It was one of the 'watch and pray' sort of budgets. One watched his incomes and his expenses as closely as he could, and prayed that when the final whistle blew at the end of the year he would find a smaller deficit than he expected. We still continue to watch those items as closely today, but thanks to the accounting controls which the operation under a complete budget system not only encourages but absolutely insists upon, we are able to direct some of our prayers to less melancholy and more worthy purposes."

Though businesses may have been somewhat slow to adopt budgetary systems of control over their activities, the subject is now engrossing the attention of practically all those in charge of industrial organizations. It might be well, before going further, to define this business budget so that we shall understand just what we are watching for in our search for the probable line of its development. When asked for a definition of budgeting, Henry Bruere defined it as, "a method for combining the coördinated intelligence of an entire organization into a plan of action based upon records of past performance and governed by a rational judgment of factors that will influence the course of the business in the future."

Budgetary principles, of course, have been used unconsciously by business men for many years. No man can carry on his business successfully unless he makes an estimate of the sales he may have, in order that he may also make an estimate of the purchases necessary to meet those orders when they come in. There is evidence also of a popular and non-technical use of the term "budget" by persons who desire to claim that their company was among the early "budgeteers." They will state that they have been using a complete budget, and that it has been a wonderful aid to them, but they will also reveal that they do not consider it necessary or desirable to budget all items of expense and income.

Though it may be true that some organizations tolerate their budgetary system as an evil necessary to the treasurer's activities, or chiefly for that phase of their business dealing with the policy of creating or purchasing new permanent equipment or the making of improvements in existing plant facilities, or possibly only as it refers to their sales and expenses, there is no doubt that business in general is taking the budget seriously today.

THE PRODUCTION BUDGET

It is now about twenty-five years since the first cost systems were introduced in the United States to aid manufacturers in finding out what their manufacturing processes were costing them. A manufacturer realized that he must know what it was costing him to produce his goods in order to have some guide in setting his selling price, even though that selling price was often determined to a large extent by competition. He insisted that he must know his "actual costs," and the cost accountant came to the rescue and developed systems of cost accounting adapted to the needs of the individual industries.

Up to this time available information had been very meagre and unscientific. Some attempts had been made, to be sure, to gather information as to what the expenses were. The various industries attacked their problems in different ways. In the contracting, printing and similar industries, the trade practice was to get an estimate of the cost of a job before placing the order, and this estimate was very often the result of adding together a number of guesses. Other companies were manufacturing on a contract basis, promising to deliver at cost-to-manufacture plus a specified percentage. Of course, if they actually knew their costs, this method might not be bad, so far as their profits were concerned, but their customers wanted to know how much their bills would be, without having to wait until after they had taken their annual inventory. They found that they must know their costs promptly and accurately, if they expected to hold their customers.

The first cost figures obtained were those for labor. About 1911 John Frederick Taylor became active in the study and analysis of jobs and the application of principles of scientific management in the shops, in his attempt to make working conditions better in order that the production labor costs might be reduced. Next, they began to study their materials and supplies, and leaks and wastes were disclosed here as well. The study of the overhead or burden came last.

During the world war business had been so active that the big problem of industry had been to get the goods produced as fast as they could sell them. The plant was studied carefully, and minute planning and scheduling of production were followed throughout the plant. A careful study was made of each operation, and work was planned in advance and routed so that there would be no congestion at any point. A careful control of purchases and the use of standard minimum and maximum limits for stock records was introduced, so that the right amounts would be ordered and on hand at all times.

But at the close of the world war, the problem changed. The depression came and there was no business. Distributors held back before placing orders for goods to be produced. Now more than ever before the manufacturers had the fact driven home to them that it was not enough to know their costs of production. They had succeeded in cutting down many production wastes through their application of job study and scientific management principles and by their close control over materials, but they must now control those costs as well, if they wished to make the deficit as small as possible. The questions of shop wastes, standardization and simplification of product and machinery used, of continuous and even operation of the plant and also the possibility of setting expense standards on items of operating costs began to receive a great deal of attention at this time.

There seems to have been considerable controversy over the wisdom of letting the foreman know the facts regarding costs in his department. Many advocated that he should not be told anything about them, as that wasn't a part of his job and he wouldn't understand anything about it if he were told, while others maintained that he was responsible for all expenses in his department and they should, therefore, be carefully explained to him. Some people advocate also a "waste budget" for the foreman.

During the world war the industries coöperated with the government in making a study of possible standardizations and eliminations of unnecessary sizes and styles. The study was almost completed when the war came to a close, and the need for standardization, from the standpoint of the government, was ended. The question was dropped for the time being. However, many industries had by this time collected information concerning their own activities which were both interesting and enlightening, and they decided that it would be a good experiment to discontinue many of their products of which sales were slow. By reducing the number of articles carried or manufactured, and by stressing those for which there seemed to be a demand, they were able to increase the turnover rate of their stock and by that means to decrease their unit cost and increase profits.

Many industries, such as the manufacture of radiators, furnaces, canned goods, hats and paper products, etc., had always run their plants very heavily during a few months of the year, and shut down or else run lightly during the remaining months. This meant that there was a large waste due to enormous amounts of capital invested in expensive machinery which was standing idle during a large portion of the time. Also, the continual "hiring and firing" caused by periodically opening and shutting down the plant was a wasteful process, especially so far as skilled workers were concerned. Much time and thought have been spent during the past few years on this important question of ironing out the peaks and filling up the valleys in production.

Though the cost accountants had given industry cost-finding systems, so far it had recognized the costs only as historical costs. They now desired some standard by which to measure their accomplishments, and to fit this need standard costs were developed. A careful study was made of past operations and costs, and predetermined costs were worked out, which could be met and should serve as a measuring stick. In other words, a "standard cost" is what something ought to cost. Standards are now being set in all controllable items for every department in industry. What an article costs more than the standard will vary with the operation of the plant. A cost system must not only reveal the actual cost but must also permit the actual cost to be compared with the standard cost which applies to any rate of plant activity.

The production budget is the latest development in the effort to control production costs. It involves both the estimate of production activities for the period and a scheduling of the manufacturing costs to produce the goods estimated. The manufacturing costs which go into the production budget are introduced at the standard costs which have been set as the attainable goal. Regular and frequent reports are made to check the attainment against the estimate, to see if it is meeting the programme set, and any cost incurred which is not a necessary cost of production should be charged to profit and loss as a business loss. It should not be allowed to go into the price of the goods produced. The estimate of production activities, of course, comes from the sales department's estimate of the sales it expects to make during the period, after that estimate has been adjusted and approved by the budget committee.

BUDGET OF SALES AND DISTRIBUTION COSTS

There has been much controversy over the question whether the production department or the sales department should rule the activities of a manufacturing plant. Some contend that the production department should be allowed to say what it can and will produce and the salesmen should be required to go out and sell these goods; while others feel that the salesmen are nearer the customers who purchase the goods and are in a better position to know what can be sold, and they should, therefore, be allowed to formulate the production programme. If the plant is to succeed there must be close coöperation and coördination between both departments. The production department is dependent upon the sales department to sell the goods it produces at a profit sufficiently large to enable the business to continue, and the sales department is dependent upon the production department to manufacture the kinds of goods that customers want, at a cost low enough to meet competition and high enough to provide the desired net profits.

Sales and production, therefore, require careful coördination. This problem of coördinating the two primary functions of a business, namely, manufacturing and selling, is primarily an executive problem, the solution of which, most executives agree, is the forecasting of sales and then the forecasting of production.

Early attempts to estimate future sales were based largely on the records of previous years, with a rough percentage added or subtracted, which represented a reasonable increase or decrease thought probable during the period. In other words, the average of the past was taken as the normal. The salesmen might be asked for their ideas about the amount of sales which they hoped to make, but there was nothing scientific about the estimate. After the estimate had been fixed, the amount was broken up into quotas and parceled out to the salesmen. These quotas based on past experience formed the original sales budget.

Today, however, other factors beside past performance are given careful consideration when determining the sales estimate. Many businesses now make an accurate statistical study of the potential sales of the entire industry and determine their share of those potential sales. They also determine general economic conditions of the present and probable cyclical changes in the future. Business men are realizing more and more that to make an intelligent estimate of sales for the period under consideration they must take into account all factors that have any influence on their business, outside as well as inside the organization, and determine as accurately as possible the influence which these factors have upon their particular business.

During the past ten years the sales manager's responsibility has been steadily increasing. With the growing recognition of marketing problems his duties have been multiplied. He must so distribute his salesmen that most of them are reasonably good profit-makers. He must distribute the goods through the various channels economically, and he must so price his goods that they shall be within the market and at the same time at a figure which will produce satisfactory profits for his company. In order to gain these ends, he must control his salesmen intelligently through forecasts and controls. He must budget expenses for each class of distribution, distribute his expenses to the product receiving the benefit of that distribution expense, and segregate distribution costs by classes of product, by distribution centres or by territories.

Today, planning of the sales is as important as the planning of production. Prior to the depression of 1921 salesmen had been left pretty much to themselves. They were paid good minimum salaries, plus expense allowances and bonuses, were given very little supervision, and did not have to put forth very much effort to reach their sales quotas, because business was good and sales came almost without the asking.

But the decline of sales during the depression, and the consequent drop in profits, caused executives to study their marketing costs minutely as they had previously studied their production costs. Industry had already cut down production costs and wastes considerably, but now people began to realize that the savings which they had made through more efficient production were being lost through inefficient and wasteful methods of distribution. They began to hold the stop-watch on the salesmen and the deliverymen, in an effort to find wastes and more efficient methods of marketing their product. Training classes were conducted for salesmen in order that their efforts might be more effective, and instead of being left to call on their customers as they wished their routes were carefully scheduled and they were required to report daily to headquarters. It was sometimes decided that the business from a certain customer was not large enough to warrant a monthly visit from the salesman, and therefore the frequency of his visits were either decreased or other methods of selling were adopted.

The question of salesmen's salaries was the subject of much study, since they form a large portion of the expense of distribution. Instead of receiving a guaranteed minimum wage plus a commission, some were placed on a straight salary with an expense allowance, while others were retained on a salary and given a bonus which was an increasing percentage of the basic salary as they exceeded the quota which had been assigned. Some were given their old salaries, but the traveling expense plus the salary could not exceed a designated percentage of the gross profits on their net sales. Some companies consulted their salesmen or distributors in determining the amount of the sales quotas assigned, and after the salesman or distributor had approved his quota it was not subject to cancellation, especially if the sales were subject to marked seasonal variation.

Sales were increased by allowing customers a percentage discount on cash purchases. This both increased the rate of turnover of stock and also brought cash into the organization so that more working capital was available. Another strategy which has served the same purpose has been the instigation of a campaign appealing to the sense of thrift of the customer by offering a larger number of units in a package at a reduced price per unit.

There is, however, a point below which the company can not afford to lower its selling price in its efforts to dispose of its goods.

Competition will force prices down, and for that reason it is essential that a company shall know the point in a volume of sales at which it will cease to make a profit if it cuts its selling price. Industry is in business to make a profit, and it must know this point in order to assure itself of profits.

There were several reasons responsible for the tardiness with which this problem came up for consideration. Until recent years the emphasis has been on production and the volume of sales. Increasing competition and the sluggishness of business have brought about the present lively interest in distribution costs. Business executives in the past have confined their studies largely to the field of production, and have felt it wiser to leave marketing, and particularly the policies surrounding it, in the hands of sales executives, who were better versed in the problem than they themselves. Another deterrent has been the fact that most business men have considered that sales are matters which can not have scientific principles applied to them as to other forms of activity. Still another condition which has been responsible for the delay is the fact that there has been such a strong urge for sales volume that the question of profits from sales has been neglected, and it is only recently that the attempt has been made to cut marketing costs.

There are many difficulties encountered in the study of distribution costs. For one thing, in production-cost accounting we confine ourselves largely to a single point—cost determination for the purposes of control. Distribution costs, however, may be regarded from many viewpoints,—they may be determined by territories in which the product is sold, by methods of sale, number of customers, size of orders and by many other possible subdivisions. Sales accounting has all the variables found in manufacturing, and also many others due to a lack of control over customers and competitors. It is also more difficult to obtain figures on distribution costs since operations are scattered over the entire country and often include activities in foreign countries as well. And even when the figures are collected, it is more difficult to interpret them because of the large proportion of joint indirect costs in the total and the various ways used in computing costs.

Probably the method which has been used longer than any other in the analysis of distribution costs is that of the ratio of individual selling costs to the volume of sales. But there are other criteria which are as important. The records on the sales books must be given careful attention. The number of accounts and the division of the total sales between those accounts are determined, to see if there are unprofitable accounts in the list. Some companies are making a careful study of this question and are informing customers that they can not afford to keep them as customers if they do not buy a specified minimum of goods during the year. In determining the profitableness of the kind of goods produced or sold, a study is made of the number of orders received for a product and the relative values of those orders. Also one must ascertain what is the value of the sales per customer's order and the comparative costs of selling the orders. The geographic or territorial distribution of the customers is also receiving attention, to find out whether all territories are profitable or some of them might be made more profitable by changing their distribution channels.

Research is also made for specific items of expense, such as delivery expense and handling expense. A survey conducted to determine the cost of handling merchandise in several classes of wholesale activity disclosed the astounding fact that, based strictly on average conditions, four classes of wholesalers, on account of the great preponderance of small orders, lost money on approximately 70 per cent. of the orders handled. The small unit of sale and the small orders so characteristic of modern business today are without doubt one of the great factors in high distribution costs today. Compilation of operating figures of 301 department stores in 1921 showed that the operating expenses were about nine times the net profits. This survey revealed the fact that per capita sales per salesman for some months varied from the low point of $975 in one store to the high point of $2,525 in another store.

There can be no effective control of distribution costs unless there is a proper classification of accounts. Information must be recorded in such a manner that it can be allocated to the departments responsible for the expenses incurred.

For many years business houses have set aside a certain amount for advertising expense. This advertising budget may be determined in the following ways: (1) based on the preceding period or an increased or decreased amount as conditions warrant, (2) allowing a certain percentage of estimated sales or (3) allowing a certain amount of each product sold.

Other methods of controlling distribution costs may be adopted, such as increasing the size of the order, instructing sales-people not to overmeasure, standardizing the size and weight of containers for the product to be shipped in, salvaging by-products, reclaiming containers and using them again, using waste paper for packing purposes, studying the work done by sales-people and transferring some to other departments during slack hours or hiring some part-time help for rush hours, and basing salesmen's salaries on the amount of sales they make plus an expense allowance.

Not long ago the only basis used for the distribution of marketing costs over the product was the percentage of those costs to sales, and the percentages were determined by the results of previous years. The natural result was that each product received the same average percentage of the marketing costs, regardless of the comparative costs of marketing the different classes of product. The analysis and distribution of overhead expenses by departments and production centres was next advocated.

An earnest effort is being made today to find a logical and practical method for distributing the various items of marketing costs over the different classes of product. Some companies are charging their selling expense on a unit basis rather than in the month in which the expenses were incurred and are abandoning monthly consideration of sales expense because their business is so seasonable that monthly consideration is of no value. The plan of allocation of distribution expenses which seems to be most discussed at present is that which maintains that all costs which are directly applicable to the product should be charged direct to the product, either as a production or a distribution charge, and that all indirect costs should be prorated to the various products in a logical manner. In other words, the expenditures should be allocated against the results that are presumed to follow the expenditures.

Progressive executives today are demanding definite information as to costs and results of sales efforts, and they want them segregated by products and territories. Cost accountants have been bending their energies and abilities more and more during the past few years, and particularly since the world war, to the problem of developing a system of cost accounting which will prove satisfactory for distribution costs, but the problem is still in its primary stages. It has proved to be difficult, but the fact that cost accountants have already developed cost-accounting systems for the manufacturer will no doubt aid them in solving more quickly this problem for distributors.

In order to assure himself of a profit the executive must find the true cost of the article. This will vary with the different volumes of sales, just as the cost of production will vary with the varying volume of production. We find, therefore, developing side by side with the sales cost accounting, the "standard" cost. Each territory will have a different profit expectancy, and it is necessary to know those profit expectancies in order that "standard distribution costs" may be determined for each territory. When cost accountants have succeeded in developing satisfactory systems of sales-cost accounting, and in determining the standard distribution costs, a long step will have been taken toward the solution of the problem of controlling distribution costs.

MANAGEMENT AND THE BUDGET

An increasing emphasis upon the necessity of measuring the efficiency of management is appearing in many of the larger corporations. Up to the present time there has not been much check upon management, but more and more corporation officers are being held responsible by their boards of directors for the carrying out of policies laid down by them. In a discussion of correct valuation of property, a banker recently said: "Yes, it is important to have a correct appraisal of your property, but how about your management? After all, it is your management and not your plant and product that we are investing our depositors' money in, for without good management, these are in themselves not productive."

One of the foremost responsibilities of management is to have the activities of the whole organization so well organized and the work in each department so well planned that when each one carries out its programme the result will be the same as if one team had been working together as a harmonious whole. It is obvious that this requires careful planning of the entire business and coordinating the detailed accomplishments of each branch or department with the common purpose of the enterprise.

After all of the phases of production have been carefully planned, quotas will have to be assigned to the salesmen, and their routes will have to be scheduled carefully in order that the cost of making the sales may be kept as low as possible. A programme of reports on their activities will have to be laid out so that the results may be controlled and the production department programme may be kept in coördination with that of sales.

It is not enough that the sales and production departments shall be working in harmony. They can not function unless there is sufficient money on hand with which to carry out their plans. If new equipment is to be purchased, it may be necessary to issue bonds in order to obtain funds. It may be that extensions will have to be made to the plant, and it must be decided which method shall be used to finance these extensions—by the issuance of more stocks or by the issuance of bonds. Arrangements must also be made so that cash will be available for working capital to carry on the regular activities of the plant.

The administrative expense will, of course, include the salaries of management, but the question of office expense will necessarily command an important position. A great deal of attention is being devoted at present to the whole subject of office management and efficiency standards for clerical help. Time studies and other methods of scientific management have been introduced into offices as a means of establishing standards and controlling administrative expense. Tests have been made to determine just how much work should be classed as a "fair day's work."

A little work has also been done toward salary standardization —the term used for a scientific method of transfer and promotion. In order to standardize salaries, it is necessary to have considerable data at hand. These data will include job analysis and specification, job classification, promotion charts and organization charts. The subject of salary standardization and administration is quite important in keeping the employees happy in their work and satisfied with the prospects for the future.

Much may be done toward the cutting down of office expense through the standardization of office equipment used. When the same sizes of files and desks, and the same makes of machines are used throughout the plant offices, better order in layout is possible, all the equipment is interchangeable, less equipment is needed if the job is done thoroughly, economies are realized in the purchase of equipment, and more and better work is turned out by the office staff. The installation of machines for purposes of recording and calculating data is also helpful in cutting down expense.

Another subject which has received the attention of management recently is the problem of regulating an even flow of work in the offices. Some companies have solved this problem by making a survey of the work to be done, measuring the output, transferring work or workers from one department to another, establishing a training department, controlling vacations and developing an employment policy.

In order effectively to control administrative expense there should be a budget, as in the other departments of the organization. The administrative-expense budget is essentially an office-expense budget. Many of the expenses of operating the offices will be found to vary sharply with the volumes of sales, but some of them will not. The mixed responsibility which prevails in the offices makes it exceedingly difficult to control these expenses, but the responsibility should be determined as accurately as possible on the basis of the functions, and then the expense should be charged to the departments as nearly as possible in accordance with that responsibility. The office operating accounts should be so classified that the controllable costs may be readily grouped departmentally in order that the charges may be made to the departments responsible for the expenses incurred. Some practical index should be determined which will equitably reflect the relative output of each department. The use of "standards" in operation and output will help to control these costs and to set the amounts for the various items in the administrative-expense budget.

As budgetary control is being adopted by business, executives are becoming more and more convinced that the chance for success of their plans is in direct proportion to the care and accuracy with which their estimates are made. If the sales estimate is wrong, the whole programme will be wrong. Twenty years ago the business man conscientiously read his own trade journals and felt that he had no time nor interest to devote to other industries around him. Today he must study other industries as well, because their condition has a very direct relation to the condition of his own.

As the business cycle advances, the executives should scrutinize more and more closely all proposals for expansion which are submitted to them. Each executive must study the long-range trend of his own business and find the rate of its normal growth and build for it. For some time there has been a belief that by studying conditions in a particular business and the general business cycle, it would be possible to discover the relation between them so that the individual business would be able to make a more accurate forecast of its future.

Interest in the problem of controlling the business cycle fluctuates with changing conditions of business. Little attention is given to it by business men until a crisis arises and the problem forces itself upon them. One method of controlling it is by planning production so that certain work is done in slack times rather than in busy times. Each business must adapt itself to the swings of the cycle.

When industry realized the need for knowing costs of production, the cost accountant developed systems of cost accounting that were adapted to specific industries and would enable companies to learn from their records what their costs of production were. With the development of cost-accounting systems came finally the idea of "standard costs" for the purpose of controlling those production costs.

A few years ago, when business executives began to see that they were making large savings through cutting their costs and eliminating their wastes in production, only to lose those potential profits through wasteful methods of distribution, the cost accountant again came to their aid and bent his energies toward the solution of the problem of developing a system of cost accounting which would correctly determine distribution costs. The problem is still a long way from being solved, but progress is being made, and no doubt in the not far distant future management will have a much better understanding of how to control these costs which are commanding so much attention today. And just as "standard costs" were developed as a means of controlling production costs, so "standard distribution costs" are being developed with sales-cost accounting in an effort to control distribution costs.

The cost accountant of the past was looked upon as a mere recorder of figures. He was, however, of real service in furnishing management with cost data. These cost figures enabled the executive at least to set selling prices more intelligently. But the function of the cost accountant today is being enlarged greatly beyond what it was ten or fifteen years ago. From a mere recorder of figures of past history he is today regarded as an adviser of management regarding the figures which shall be recorded in the future. Today he is expected to explain and to interpret to management what the figures which have been recorded imply as to the possible future conditions of the business.

The title of controller, which is sometimes given to the chief accountant, has grown in importance as budgeting has grown in industry. He is generally a man trained in business as well as accountancy, and is the advisory aid to the chief executive. He coöperates with the sales manager in the compilation of statistical data for the control of the sales department expense budget, with the production manager with regard to the preparation of data for the production budget, and aids other department heads by supplying them with facts and interpretations of facts essential to sound managerial planning. In many companies he is placed in charge of the preparation of the budget and is also made responsible for its enforcement.

With the increasing recognition of the need of more careful study of all factors, inside and outside of a plant, which may affect its activities and profits, the statistician has been growing in importance in the organization. In a study reported in 1923, which attempted to ascertain the extent to which precise statistical methods were being used as aids in the stabilization of business, one of the most interesting things shown by the replies was that where the statistical procedure required was relatively simple it was used extensively, but where the work was so complex as to demand a specialized training in statistics, the procedure was not used.

Probably the main reason for the rapid increase in business forecasting and scientific planning is that predictions and plans based on statistical forecasts have proved of monetary value under actual trial. And the fact that it has proven its worth has resulted in the inclusion of a statistical department with trained statisticians in the organizations of the leading companies. They have found that the compilation of statistics in a separate department results in numerous economies, work is done by persons trained in their task, duplicate collection of data is avoided, and immediate response can be made to any sudden or irregular requests for information. The work can also be done more smoothly, more quickly and at less expense than in any other way.

The treasurer is one of the most important financial aids to the chief executive, if not the most important. It is his duty to study the sales and production programmes in order to determine what working capital will be needed at any moment during the budget period. He must know how much cash can be expected from sales and other sources and how much it will be necessary to obtain to supplement this to meet the needs of the business in order that all the departments may carry out their plans. It is his duty to prepare a schedule of these financial needs and present it to the chief executive so that he can make his arrangements in ample time for necessary working capital, and also for any other methods of financing which may be deemed desirable to meet capital expenditures.

The forecast activities of the entire organization are summarized in the financial budget. Production, sales, management—every department in the organization—is dependent upon a proper planning for the money which it needs in order to do its work on schedule time so that all departments may work together. If finances fall short, some department may be handicapped, and that will hamper the entire organization.

Accountants, however, are not fully agreed as to what the financial budget actually includes. Some speak of it as if it included a long-term planning of finances which would cover both the budgetary period and long-term borrowing over a period of years. Others speak of the financial budget as only the financial plans for the budgetary period, while the long-term planning of finances is spoken of as the financial programme.

Practically every concern has some kind of a budget or forecast. The more common, of course, is the financial budget used by the treasurer in anticipating his cash requirements. The need for a complete and comprehensive financial budget is largely due to the fact that the income from a definite volume of output is limited to the return from the selling prices, established often in advance of sales and under the influence of sharp competition, and the possibility that such incomes may be inadequate to take care of all expenditures unless they are held within predetermined limits, and the further possibility that the income, unless allotted in predetermined proportions to specific projects and uses may be devoted too largely to minor needs, to the prejudice of more important ones.

Many seem to think of their financial budget merely as a means of obtaining money for credit. To these, the balance-sheet budget seems to be the logical form to use. Some suggest that a budget should be submitted with the balance-sheet and the profit-and-loss statement to the banker. There seems to be no doubt that a business man who can go to his banker and show him a well planned budget, which indicates that he has carefully estimated his operations for the next year, will make a much more favorable impression and be much more apt to get the assistance he desires than one who is uncertain and doubtful as to the probable outcome of his activities during the coming year.

CONCLUSIONS

One may, therefore, draw the following conclusions regarding the development of the budget in American industry:

1. That the budget was introduced into business in the United States after it had been used by governmental units.
2. Every business has some form of budget, though it may be only the unconscious application of budgetary principles.
3. Many organizations budgeted their activities only in certain departments first and later adopted the complete budget for all departments.
4. The scientific business budget is largely a post-bellum development.
5. The scientific budget arose first in the production department, where the need for the reduction of costs was first emphasized.
6. Cost accountants developed cost-accounting systems in answer to the demand of the industries for a means whereby they could find and record their "actual" costs of manufacture.
7. After finding their costs they realized that this was not enough—they must also control costs—and the result was the development of "standard" costs.
8. An increasing emphasis on the responsibility of management, and its accountability to the board of directors in carrying out the policies laid down by them turned the spotlight on the wasteful methods of distribution.
9. During the world war the big problem was to produce fast enough to deliver the goods sold, while after the war and during the depression which followed the main problem was to cut down all costs in order to make losses as small as possible. This also resulted in the serious study of wasteful methods in distribution.
10. Cost accountants are now bending their efforts toward the development of cost-accounting systems which will prove satisfactory for controlling distribution costs.
11. "Standard-distribution" costs are being developed with sales-cost accounting, thus showing that the study of distribution

costs is passing through the same stages through which the study of production costs passed.

12. The method of distributing sales expense has developed from the application of a rough percentage on volume of sales to the desire to charge all expense directly to the product to which it applies.

13. Much attention is now being given also to the control of administrative expense, and active research is being carried on in an effort to increase the efficiency of office work, through the use of "standards" of output and salaries, the replacing of persons by machines, and the classification of expenses on the basis of responsibility.

14. Accountants are not agreed in the use of the term "financial budget." To some it includes only the budgetary period, while to others it includes long-term financing as well.

15. The "cash-requirements" form of financial budget is the most common form in use in business.

16. The complete and detailed financial budget which gives detailed plans for financing every activity of the business is still in the primary stage.

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